

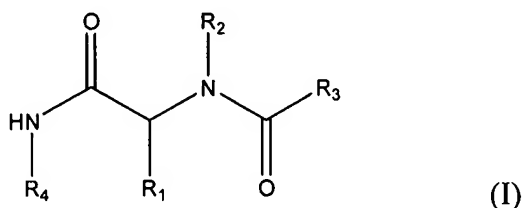
**Amendments to the Claims**

Please amend Claims 1, 2 and 24-28. The Claim Listing below will replace all prior versions of the Claims in the application.

**Claim Listing**

What is Claimed is:

1. (Currently Amended) A method of inhibiting rejection of a transplanted organ[[,]] or transplanted tissue ~~or transplanted cell~~ in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by Formula (I):



or a ~~physiological~~ pharmaceutically acceptable salt thereof, wherein:

R<sub>1</sub> is a substituted or unsubstituted aryl group or a substituted or unsubstituted alkyl group;

R<sub>2</sub> is an optionally substituted aralkyl group or an alkyl group substituted with -NR<sub>5</sub>R<sub>6</sub>;

R<sub>3</sub> is a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group;

R<sub>4</sub> a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group; and

$R_5$  and  $R_6$  are independently selected from a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group or  $R_5$  and  $R_6$  taken together with the nitrogen to which they are attached are a non-aromatic heterocyclic group;

wherein each substituted aryl group, substituted alkyl group and substituted aralkyl group are independently C-substituted with -OH, -Br, -Cl, -I, -F, R, -CH<sub>2</sub>R, -OCH<sub>2</sub>R, -CH<sub>2</sub>OC(O)R, -OR, -O-COR, -COR, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR, -N(R)<sub>2</sub>, -COOR, -CHO, -CONH<sub>2</sub>, -CONHR, -CON(R)<sub>2</sub>, -NHCOR, -NRCOR, -NHCONH<sub>2</sub>, -NHCONRH, -NHCON(R)<sub>2</sub>, -NRCONH<sub>2</sub>, -NRCONRH, -NRCON(R)<sub>2</sub>, -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR, -C(=NH)-N(R)<sub>2</sub>, -C(=NR)-NH<sub>2</sub>, -C(=NR)-NHR, -C(=NR)-N(R)<sub>2</sub>, -NH-C(=NH)-NH<sub>2</sub>, -NH-C(=NH)-NHR, -NH-C(=NH)-N(R)<sub>2</sub>, -NH-C(=NR)-NH<sub>2</sub>, -NH-C(=NR)-NHR, -NH-C(=NR)-N(R)<sub>2</sub>, -NRH-C(=NH)-NH<sub>2</sub>, -NR-C(=NH)-NHR, -NR-C(=NH)-N(R)<sub>2</sub>, -NR-C(=NR)-NH<sub>2</sub>, -NR-C(=NR)-NHR, -NR-C(=NR)-N(R)<sub>2</sub>, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR, -SO<sub>2</sub>NR<sub>2</sub>, -SH, -SO<sub>k</sub>R or -NH-C(=NH)-NH<sub>2</sub>; and/or

wherein each substituted aryl group and substituted aralkyl group are independently substituted at a nitrogen atom, if present, with -R', -N(R')<sub>2</sub>, -C(O)R', -CO<sub>2</sub>R', -C(O)C(O)R', -C(O)CH<sub>2</sub>C(O)R', -SO<sub>2</sub>R', -SO<sub>2</sub>N(R')<sub>2</sub>, -C(=S)N(R')<sub>2</sub>, -C(=NH)-N(R')<sub>2</sub>, or -NR'SO<sub>2</sub>R'; and

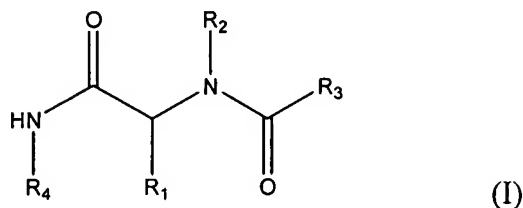
R' is hydrogen, an alkyl group, phenyl, -O(Phenyl), CH<sub>2</sub>(Phenyl), heteroaryl or non-aromatic heterocyclic ring;

each R is independently an alkyl, benzyl, or aryl group; or -N(R)<sub>2</sub>, taken together, forms a non-aromatic heterocyclic group; and

k is 0, 1 or 2.

2. (Currently Amended) A method of inhibiting chronic rejection of a transplanted organ or transplanted tissue in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method

comprising the step of administering an effective amount of a compound represented by Formula (I):



or a physiological pharmaceutically acceptable salt thereof, wherein:

$R_1$  is a substituted or unsubstituted aryl group or a substituted or unsubstituted alkyl group;

$R_2$  is an optionally substituted aralkyl group or an alkyl group substituted with  $-NR_5R_6$ ;

$R_3$  is a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group;

$R_4$  a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group; and

$R_5$  and  $R_6$  are independently selected from a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group or  $R_5$  and  $R_6$  taken together with the nitrogen to which they are attached are a non-aromatic heterocyclic group;

wherein each substituted aryl group, substituted alkyl group and substituted aralkyl group are independently C-substituted with -OH, -Br, -Cl, -I, -F, R,  $-CH_2R$ ,  $-OCH_2R$ ,  $-CH_2OC(O)R$ , -OR, -O-COR, -COR, -CN,  $-NO_2$ ,  $-COOH$ ,  $-SO_3H$ ,  $-NH_2$ , -NHR,  $-N(R)_2$ , -COOR, -CHO, -CONH<sub>2</sub>, -CONHR,  $-CON(R)_2$ , -NHCOR, -NRCOR, -NHCONH<sub>2</sub>, -NHCONRH,  $-NHCON(R)_2$ , -NRCONH<sub>2</sub>, -NRCONRH,  $-NRCON(R)_2$ ,  $-C(=NH)-NH_2$ ,  $-C(=NH)-NHR$ ,  $-C(=NH)-N(R)_2$ ,  $-C(=NR)-NH_2$ ,  $-C(=NR)-NHR$ ,  $-C(=NR)-N(R)_2$ ,  $-NH-C(=NH)-NH_2$ ,  $-NH-C(=NH)-NHR$ ,  $-NH-C(=NH)-N(R)_2$ ,  $-NH-C(=NR)-NH_2$ ,  $-NH-C(=NR)-NHR$ ,  $-NH-C(=NR)-N(R)_2$ ,  $-NRH-C(=NH)-NH_2$ ,  $-NR-C(=NH)-NHR$ ,  $-NR-C(=NH)-N(R)_2$ ,  $-NR-C(=NR)-NH_2$ ,  $-NR-C(=NR)-NHR$ ,  $-NR-C(=NR)-N(R)_2$ ,  $-SO_2NH_2$ ,  $-SO_2NHR$ ,  $-SO_2NR_2$ , -SH,  $-SO_kR$  or  $-NH-C(=NH)-NH_2$ ; and/or

wherein each substituted aryl group and substituted aralkyl group are independently substituted at a nitrogen atom, if present, with  $-R'$ ,  $-N(R')_2$ ,  $-C(O)R'$ ,  $-CO_2R'$ ,  $-C(O)C(O)R'$ ,  $-C(O)CH_2C(O)R'$ ,  $-SO_2R'$ ,  $-SO_2N(R')_2$ ,  $-C(=S)N(R')_2$ ,  $-C(=NH)-N(R')_2$ , or  $-NR'SO_2R'$ ; and

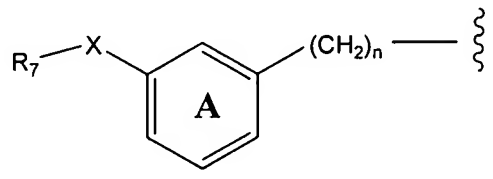
$R'$  is hydrogen, an alkyl group, phenyl,  $-O(\text{Phenyl})$ ,  $CH_2(\text{Phenyl})$ , heteroaryl or non-aromatic heterocyclic ring;

each  $R$  is independently an alkyl, benzyl, or aryl group; or  $-N(R)_2$ , taken together, forms a non-aromatic heterocyclic group; and

$k$  is 0, 1 or 2.

3. (Original) The method of Claim 2 wherein  $R_2$  is an optionally substituted heteroaralkyl group or an alkyl group substituted with  $-NR_5R_6$ .
4. (Original) The method of Claim 3 wherein  $R_4$  is an optionally substituted aryl group, an optionally substituted cycloalkyl group, an optionally substituted  $C_1$ - $C_4$  aralkyl group or an optionally substituted  $C_1$ - $C_4$  cycloalkylalkyl group.
5. (Original) The method of Claim 4 wherein  $R_4$  is an optionally substituted phenyl group, an optionally substituted phenyl- $C_1$ - $C_4$ -alkyl group, an optionally substituted diphenyl- $C_1$ - $C_4$ -alkyl group, an optionally substituted  $C_3$ - $C_8$ -cycloalkyl- $C_1$ - $C_4$ -alkyl group or an optionally substituted di- $(C_3$ - $C_8$ -cycloalkyl)- $C_1$ - $C_4$ -alkyl group.
6. (Original) The method of Claim 5 wherein  $R_4$  is an optionally substituted benzyl, an optionally substituted diphenylmethyl, an optionally substituted 2-phenylethyl, an optionally substituted 1,2-diphenylethyl, an optionally substituted 2,2-diphenylethyl or an optionally substituted 3,3-diphenylpropyl.
7. (Original) The method of Claim 3 wherein  $R_1$  is an optionally substituted aryl group or an optionally substituted  $C_1$ - $C_4$  aralkyl group.

8. (Original) The method of Claim 7 wherein  $R_1$  is an optionally substituted phenyl group or an optionally substituted phenyl- $C_1$ - $C_4$  alkyl group.
9. (Original) The method of Claim 3 wherein  $R_3$  is an optionally substituted aryl group or an optionally substituted  $C_1$ - $C_4$  aralkyl group.
10. (Original) The method of Claim 9 wherein  $R_3$  is an optionally substituted phenyl, an optionally substituted phenyl- $C_1$ - $C_4$ -alkyl, an optionally substituted diphenyl- $C_1$ - $C_4$ -alkyl, an optionally substituted pyrazolyl, an optionally substituted pyrazolyl- $C_1$ - $C_4$ -alkyl, an optionally substituted indolyl, an optionally substituted indolyl- $C_1$ - $C_4$ -alkyl, thienylphenyl, thienylphenyl- $C_1$ - $C_4$ -alkyl, furanylphenyl, furanylphenyl- $C_1$ - $C_4$ -alkyl, an optionally substituted fluorenyl, an optionally substituted fluorenyl- $C_1$ - $C_4$ -alkyl, an optionally substituted naphthyl, an optionally substituted naphthyl- $C_1$ - $C_4$ -alkyl, an optionally substituted quinoxaliny, an optionally substituted quinoxaliny- $C_1$ - $C_4$ -alkyl, an optionally substituted quinazoliny, an optionally substituted quinazoliny- $C_1$ - $C_4$ -alkyl, an optionally substituted pyrroly, an optionally substituted pyrroly- $C_1$ - $C_4$ -alkyl, an optionally substituted thienyl, an optionally substituted thienyl- $C_1$ - $C_4$ -alkyl, an optionally substituted furanyl, an optionally substituted furanyl- $C_1$ - $C_4$ -alkyl, an optionally substituted pyridyl or an optionally substituted- $C_1$ - $C_4$  pyridyl.
11. (Previously Presented) The method of Claim 10 wherein  $R_3$  is represented by the following structural formula:



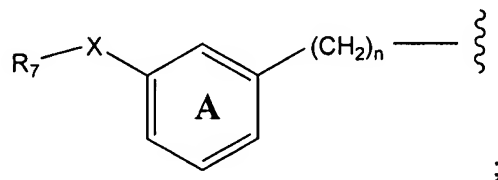
wherein Ring A is substituted or unsubstituted;  $R_7$  is an optionally substituted phenyl, optionally substituted furanyl, optionally substituted thienyl or optionally substituted pyridyl group;  $n$  is an integer from 1-4; and  $X$  is a bond,  $CH_2$ ,  $OCH_2$ ,  $CH_2OC(O)$ ,  $CO$ ,  $OC(O)$ ,  $C(O)O$ ,  $O$ ,  $S$ ,  $SO$  or  $SO_2$ .

12. (Previously Presented) The method of Claim 3 wherein R<sub>3</sub> is an optionally substituted 2-cyclohexylethyl, an optionally substituted 2-cyclopentylethyl, or an optionally substituted C<sub>3</sub>-C<sub>8</sub> secondary or tertiary alkyl group.
13. (Original) The method of Claim 3 wherein R<sub>2</sub> is an optionally substituted 2-(imidazol-4-yl)ethyl, an optionally substituted 3-(imidazol-4-yl)propyl, an optionally substituted 3-(imidazol-1-yl)propyl, an optionally substituted 2-(morpholin-4-yl)ethyl, an optionally substituted 2-(4-pyrazolyl)ethyl, an optionally substituted 2-*N,N*-dimethylaminoethyl or an optionally substituted 3-*N,N*-dimethylaminopropyl.
14. (Original) The method of Claim 3 wherein:
  - a) R<sub>1</sub> is an optionally substituted aryl group or an optionally substituted C<sub>1</sub>-C<sub>4</sub> aralkyl group;
  - b) R<sub>3</sub> is an optionally substituted aryl group or an optionally substituted C<sub>1</sub>-C<sub>4</sub> aralkyl group; and
  - c) R<sub>4</sub> is an optionally substituted aryl group, an optionally substituted cycloalkyl group, an optionally substituted C<sub>1</sub>-C<sub>4</sub> aralkyl group or an optionally substituted C<sub>1</sub>-C<sub>4</sub> cycloalkylalkyl group.
15. (Original) The method of Claim 3 wherein:
  - a) R<sub>1</sub> is an optionally substituted phenyl group or an optionally substituted phenyl-C<sub>1</sub>-C<sub>4</sub> alkyl group;
  - b) R<sub>3</sub> a substituted or unsubstituted phenyl, phenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, diphenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, pyrazolyl, pyrazolyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, indolyl, indolyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienylphenyl, thienylphenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furanylphenyl, furanylphenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, fluorenyl, fluorenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, naphthyl, naphthyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, quinoxaliny, quinoxaliny-C<sub>1</sub>-C<sub>4</sub>-alkyl, an optionally substituted quinazolinyl, an optionally substituted quinazolinyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, pyrrolyl, pyrrolyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thienyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furanyl or furanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl; and

c)  $R_4$  is an optionally substituted phenyl group, an optionally substituted phenyl- $C_1$ - $C_4$ -alkyl group, an optionally substituted diphenyl- $C_1$ - $C_4$ -alkyl group, an optionally substituted  $C_3$ - $C_8$ -cycloalkyl- $C_1$ - $C_4$ -alkyl group or an optionally substituted di-( $C_3$ - $C_8$ -cycloalkyl)- $C_1$ - $C_4$ -alkyl group.

16. (Original) The method of Claim 15 wherein  $R_2$  is an optionally substituted imadazolyl- $C_1$ - $C_4$ -alkyl group or a  $C_1$ - $C_4$  alkyl group substituted with  $-NR_5R_6$ .

17. (Previously Presented) The method of Claim 16 wherein  $R_3$  is represented by the following structural formula:



wherein Ring A substituted or unsubstituted;  $R_7$  is an optionally substituted phenyl, furanyl, thienyl or pyridyl group;  $n$  is an integer from 1-4; and  $X$  is a bond,  $CH_2$ ,  $OCH_2$ ,  $CH_2OC(O)$ ,  $CO$ ,  $OC(O)$ ,  $C(O)O$ ,  $O$ ,  $S$ ,  $SO$  or  $SO_2$ .

18. (Original) The method of Claim 17 wherein  $R_4$  is 2,2-diphenylethyl, 2-phenylethyl, benzyl, diphenylmethyl, 1,2-diphenylethyl, 3,3-diphenylpropyl, benzyl, or 2-pyridylethyl, each optionally substituted with  $-OH$ , halogen,  $R$ ,  $-CH_2R$ ,  $-OCH_2R$ ,  $-CH_2OC(O)R$ ,  $-OR$ ,  $-O-COR$ ,  $-COR$ ,  $-CN$ ,  $-NO_2$ ,  $-COOH$ ,  $-SO_3H$ ,  $-NH_2$ ,  $-NHR$ ,  $-N(R)_2$ ,  $-COOR$ ,  $-CHO$ ,  $-CONH_2$ ,  $-CONHR$ ,  $-CON(R)_2$ ,  $-NHCOR$ ,  $-NRCOR$ ,  $-NHCONH_2$ ,  $-NHCONRH$ ,  $-NHCON(R)_2$ ,  $-NRCONH_2$ ,  $-NRCONRH$ ,  $-NRCON(R)_2$ ,  $-C(=NH)-NH_2$ ,  $-C(=NH)-NHR$ ,  $-C(=NH)-N(R)_2$ ,  $-C(=NR)-NH_2$ ,  $-C(=NR)-NHR$ ,  $-C(=NR)-N(R)_2$ ,  $-NH-C(=NH)-NH_2$ ,  $-NH-C(=NH)-NHR$ ,  $-NH-C(=NH)-N(R)_2$ ,  $-NH-C(=NR)-NH_2$ ,  $-NH-C(=NR)-NHR$ ,  $-NH-C(=NR)-N(R)_2$ ,  $-NRH-C(=NH)-NH_2$ ,  $-NR-C(=NH)-NHR$ ,  $-NR-C(=NH)-N(R)_2$ ,  $-NR-C(=NR)-NH_2$ ,  $-NR-C(=NR)-NHR$ ,  $-NR-C(=NR)-N(R)_2$ ,  $-SO_2NH_2$ ,  $-SO_2NHR$ ,  $-SO_2N(R)_2$ ,  $-SH$  or  $-SO_kR$ ;

each R is independently C<sub>1</sub>-C<sub>4</sub> alkyl or phenyl optionally substituted with amino, alkylamino, dialkylamino, aminocarbonyl, halogen, alkyl, alkylaminocarbonyl, dialkylaminocarbonyloxy, alkoxy, nitro, cyano, carboxy, alkoxycarbonyl, alkylcarbonyl, hydroxy, haloalkoxy, or haloalkyl; and

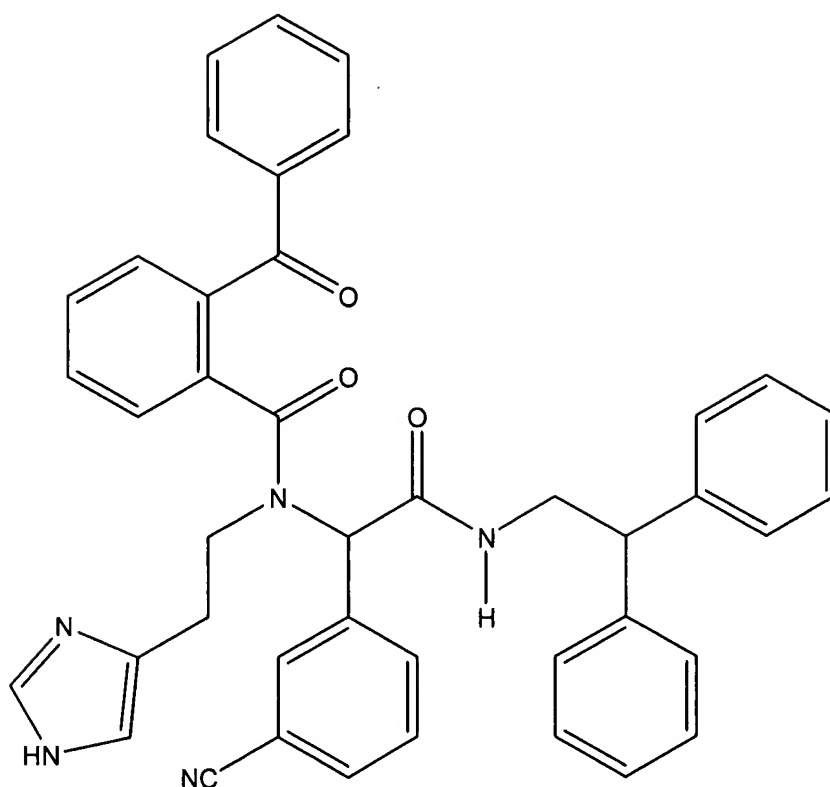
k is zero, one or two.

19. (Original) The method of Claim 18 wherein R<sub>1</sub> is a phenyl group or phenyl-C<sub>1</sub>-C<sub>4</sub> alkyl group each optionally substituted with R, -CH<sub>2</sub>R, -OCH<sub>2</sub>R, -CH<sub>2</sub>OC(O)R, -OH, halogen, -OR, -O-COR, -COR, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR, -N(R)<sub>2</sub>, -COOR, -CHO, -CONH<sub>2</sub>, -CONHR, -CON(R)<sub>2</sub>, -NHCOR, -NRCOR, -NHCONH<sub>2</sub>, -NHCONRH, -NHCON(R)<sub>2</sub>, -NRCONH<sub>2</sub>, -NRCONRH, -NRCON(R)<sub>2</sub>, -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR, -C(=NH)-N(R)<sub>2</sub>, -C(=NR)-NH<sub>2</sub>, -C(=NR)-NHR, -C(=NR)-N(R)<sub>2</sub>, -NH-C(=NH)-NH<sub>2</sub>, -NH-C(=NH)-NHR, -NH-C(=NH)-N(R)<sub>2</sub>, -NH-C(=NR)-NH<sub>2</sub>, -NH-C(=NR)-NHR, -NH-C(=NR)-N(R)<sub>2</sub>, -NRH-C(=NH)-NH<sub>2</sub>, -NR-C(=NH)-NHR, -NR-C(=NH)-N(R)<sub>2</sub>, -NR-C(=NR)-NH<sub>2</sub>, -NR-C(=NR)-NHR, -NR-C(=NR)-N(R)<sub>2</sub>, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR, -SO<sub>2</sub>N(R)<sub>2</sub>, -SH or -SO<sub>k</sub>R.
20. (Original) The method of Claim 19 wherein R<sub>1</sub> is a phenyl group or phenyl-C<sub>1</sub>-C<sub>2</sub> alkyl group, each optionally substituted with C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halogen, CN, C<sub>1</sub>-C<sub>4</sub>-alkylthiol, C<sub>1</sub>-C<sub>4</sub>-haloalkyl or phenoxy; R<sub>4</sub> is 2,2-diphenylethyl, 2-phenylethyl, benzyl, diphenylmethyl, 1,2-diphenylethyl, 3,3-diphenylpropyl, benzyl, or 2-pyridylethyl, each optionally substituted with C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halogen, CN, C<sub>1</sub>-C<sub>4</sub>-alkylthiol, C<sub>1</sub>-C<sub>4</sub>-haloalkyl or phenoxy; R<sub>7</sub> is an optionally substituted phenyl group; n is 1; and X is CO.
21. (Original) The method of Claim 20 wherein Ring A is unsubstituted and R<sub>7</sub> is a phenyl group optionally substituted with R, -CH<sub>2</sub>R, -OCH<sub>2</sub>R, -CH<sub>2</sub>OC(O)R, -OH, halogen, -OR, -O-COR, -COR, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR, -N(R)<sub>2</sub>, -COOR, -CHO, -CONH<sub>2</sub>, -CONHR, -CON(R)<sub>2</sub>, -NHCOR, -NRCOR, -NHCONH<sub>2</sub>, -NHCONRH, -NHCON(R)<sub>2</sub>, -NRCONH<sub>2</sub>, -NRCONRH, -NRCON(R)<sub>2</sub>, -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR,



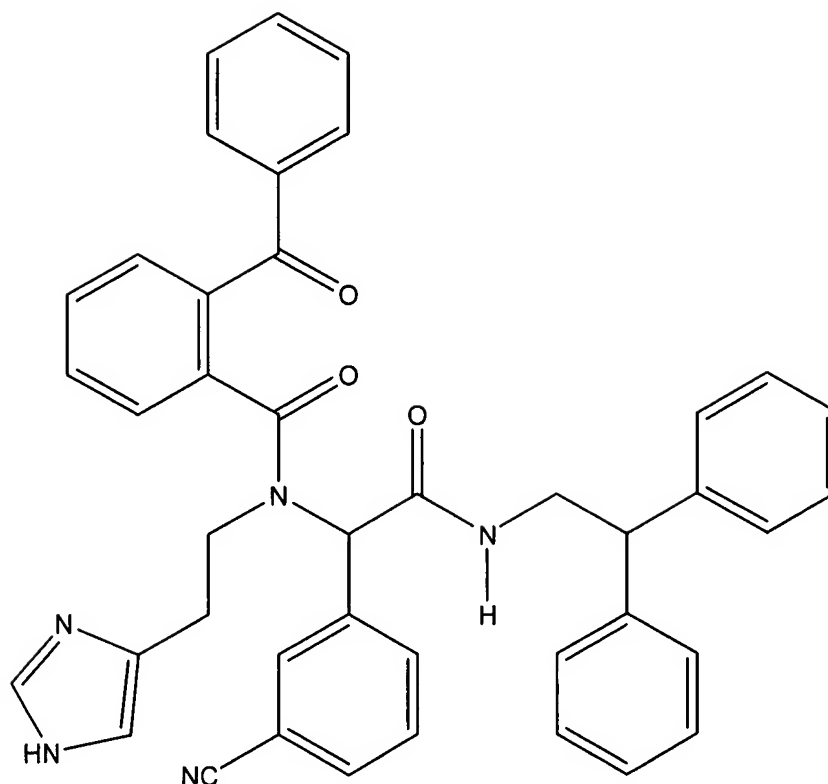
-C(=NH)-N(R)<sub>2</sub>, -C(=NR)-NH<sub>2</sub>, -C(=NR)-NHR, -C(=NR)-N(R)<sub>2</sub>, -NH-C(=NH)-NH<sub>2</sub>,  
 -NH-C(=NH)-NHR, -NH-C(=NH)-N(R)<sub>2</sub>, -NH-C(=NR)-NH<sub>2</sub>, -NH-C(=NR)-NHR,  
 -NH-C(=NR)-N(R)<sub>2</sub>, -NRH-C(=NH)-NH<sub>2</sub>, -NR-C(=NH)-NHR, -NR-C(=NH)-N(R)<sub>2</sub>,  
 -NR-C(=NR)-NH<sub>2</sub>, -NR-C(=NR)-NHR, -NR-C(=NR)-N(R)<sub>2</sub>, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR,  
 -SO<sub>2</sub>N(R)<sub>2</sub>, -SH or -SO<sub>k</sub>R.

22. (Original) The method of Claim 21 wherein R<sub>7</sub> is a phenyl group.
23. (Original) The method of Claim 22 wherein R<sub>2</sub> is 2-(imidazol-4-yl)ethyl.
24. (Currently Amended) A method of inhibiting rejection of a transplanted organ[[,]] or transplanted tissue ~~or transplanted cell~~ in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof.

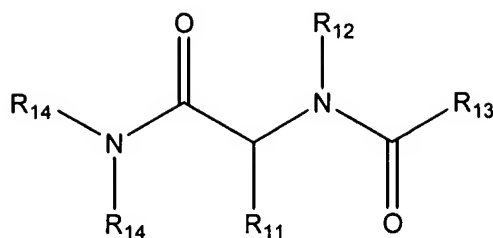
25. (Currently Amended) A method of inhibiting chronic rejection of a transplanted organ or transplanted tissue in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by the following structural formula:



(II).

or a pharmaceutically acceptable salt thereof.

26. (Currently Amended) A method of inhibiting rejection of a transplanted organ[[.]] or transplanted tissue ~~or transplanted cell~~ in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by the following structural formula:



or a ~~physiologically~~ pharmaceutically acceptable salt thereof, wherein:

R<sub>11</sub> is -H, a substituted or unsubstituted aryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaryl or a substituted or unsubstituted heteroaralkyl;

R<sub>12</sub> is alkyl substituted with NR<sub>15</sub>R<sub>16</sub>, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaralkyl, or a substituted or unsubstituted heterocycloalkylalkyl;

R<sub>13</sub> is a substituted or unsubstituted alkyl, a substituted or unsubstituted aryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted cycloalkylalkyl, a substituted or unsubstituted heteroaryl, a substituted or unsubstituted heteroaralkyl, a substituted or unsubstituted benzophenonyl, or a substituted or unsubstituted cycloalkylalkyl; and

each R<sub>14</sub> is independently, -H, a substituted or unsubstituted alkyl, a substituted or unsubstituted aryl, substituted or unsubstituted aralkyl or a substituted or unsubstituted heteroaralkyl;

R<sub>15</sub> and R<sub>16</sub> are independently selected from H, a substituted or unsubstituted alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted aryl or unsubstituted aralkyl or R<sub>13</sub> and R<sub>14</sub> together with the nitrogen to which they are attached are a heterocycloalkyl;

wherein each substituted aryl group, substituted alkyl group and substituted aralkyl group are independently C-substituted with -OH, -Br, -Cl, -I, -F, R, -CH<sub>2</sub>R, -OCH<sub>2</sub>R, -CH<sub>2</sub>OC(O)R, -OR, -O-COR, -COR, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR, -N(R)<sub>2</sub>, -COOR, -CHO, -CONH<sub>2</sub>, -CONHR, -CON(R)<sub>2</sub>, -NHCOR, -NRCOR, -NHCONH<sub>2</sub>, -NHCONRH, -NHCON(R)<sub>2</sub>, -NRCONH<sub>2</sub>, -NRCONRH, -NRCON(R)<sub>2</sub>, -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR, -C(=NH)-N(R)<sub>2</sub>, -C(=NR)-NH<sub>2</sub>, -C(=NR)-NHR, -C(=NR)-N(R)<sub>2</sub>, -NH-C(=NH)-NH<sub>2</sub>, -NH-C(=NH)-NHR,

-NH-C(=NH)-N(R)<sub>2</sub>, -NH-C(=NR)-NH<sub>2</sub>, -NH-C(=NR)-NHR, -NH-C(=NR)-N(R)<sub>2</sub>,  
 -NRH-C(=NH)-NH<sub>2</sub>, -NR-C(=NH)-NHR, -NR-C(=NH)-N(R)<sub>2</sub>, -NR-C(=NR)-NH<sub>2</sub>,  
 -NR-C(=NR)-NHR, -NR-C(=NR)-N(R)<sub>2</sub>, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR, -SO<sub>2</sub>NR<sub>2</sub>, -SH, -SO<sub>k</sub>R or  
 -NH-C(=NH)-NH<sub>2</sub>; and/or

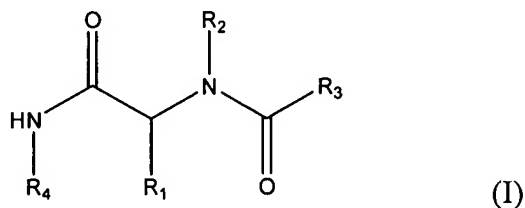
wherein each substituted aryl group and substituted aralkyl group are independently substituted at a nitrogen atom, if present, with -R', -N(R')<sub>2</sub>, -C(O)R', -CO<sub>2</sub>R', -C(O)C(O)R', -C(O)CH<sub>2</sub>C(O)R', -SO<sub>2</sub>R', -SO<sub>2</sub>N(R')<sub>2</sub>, -C(=S)N(R')<sub>2</sub>, -C(=NH)-N(R')<sub>2</sub>, or -NR'SO<sub>2</sub>R'; and

R' is hydrogen, an alkyl group, phenyl, -O(Phenyl), CH<sub>2</sub>(Phenyl), heteroaryl or non-aromatic heterocyclic ring;

each R is independently an alkyl, benzyl, or aryl group; or -N(R)<sub>2</sub>, taken together, forms a non-aromatic heterocyclic group; and

k is 0, 1 or 2.

27. (Currently Amended) A method of inhibiting acute and chronic rejection of a transplanted organ[[,] or transplanted tissue or transplanted cell in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by Formula (I):



or a ~~physiological~~ pharmaceutically acceptable salt thereof, wherein:

R<sub>1</sub> is a substituted or unsubstituted aryl group or a substituted or unsubstituted alkyl group;

$R_2$  is an optionally substituted aralkyl group or an alkyl group substituted with  $-NR_5R_6$ ;

$R_3$  is a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group;

$R_4$  a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group; and

$R_5$  and  $R_6$  are independently selected from a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group or  $R_5$  and  $R_6$  taken together with the nitrogen to which they are attached are a non-aromatic heterocyclic group;

wherein each substituted aryl group, substituted alkyl group and substituted aralkyl group are independently C-substituted with -OH, -Br, -Cl, -I, -F, R,  $-CH_2R$ ,  $-OCH_2R$ ,  $-CH_2OC(O)R$ , -OR, -O-COR, -COR, -CN,  $-NO_2$ ,  $-COOH$ ,  $-SO_3H$ ,  $-NH_2$ , -NHR,  $-N(R)_2$ , -COOR, -CHO, -CONH $_2$ , -CONHR, -CON(R) $_2$ , -NHCOR, -NRCOR, -NHCONH $_2$ , -NHCONRH, -NHCON(R) $_2$ , -NRCONH $_2$ , -NRCONRH, -NRCON(R) $_2$ ,  $-C(=NH)-NH_2$ ,  $-C(=NH)-NHR$ ,  $-C(=NH)-N(R)_2$ ,  $-C(=NR)-NH_2$ ,  $-C(=NR)-NHR$ ,  $-C(=NR)-N(R)_2$ ,  $-NH-C(=NH)-NH_2$ ,  $-NH-C(=NH)-NHR$ ,  $-NH-C(=NH)-N(R)_2$ ,  $-NH-C(=NR)-NH_2$ ,  $-NH-C(=NR)-NHR$ ,  $-NH-C(=NR)-N(R)_2$ ,  $-NRH-C(=NH)-NH_2$ ,  $-NR-C(=NH)-NHR$ ,  $-NR-C(=NH)-N(R)_2$ ,  $-NR-C(=NR)-NH_2$ ,  $-NR-C(=NR)-NHR$ ,  $-NR-C(=NR)-N(R)_2$ ,  $-SO_2NH_2$ ,  $-SO_2NHR$ ,  $-SO_2NR_2$ , -SH,  $-SO_kR$  or  $-NH-C(=NH)-NH_2$ ; and/or

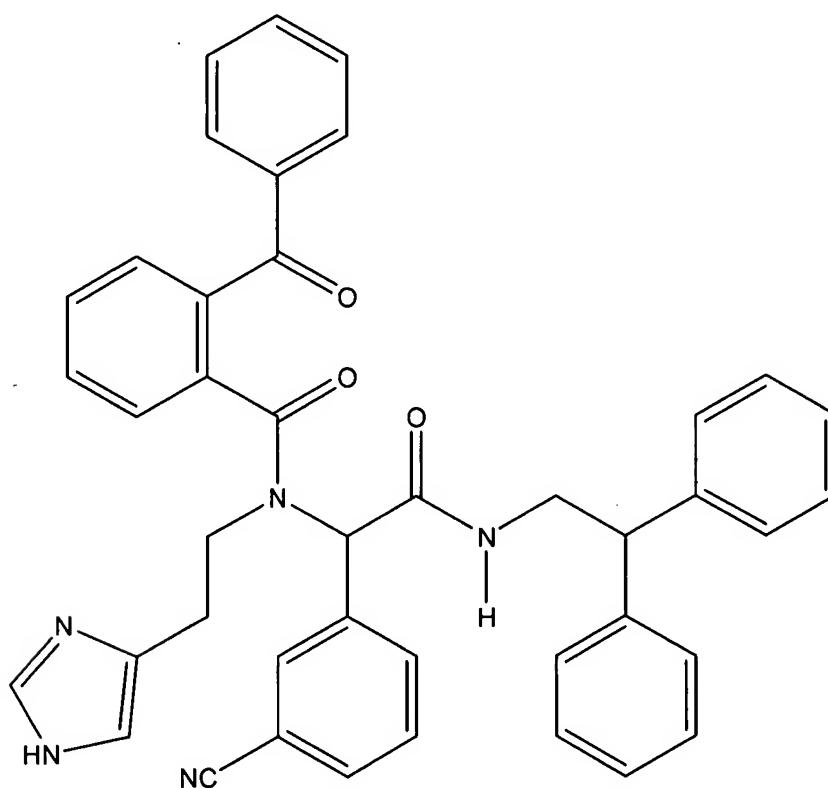
wherein each substituted aryl group and substituted aralkyl group are independently substituted at a nitrogen atom, if present, with  $-R'$ ,  $-N(R')_2$ ,  $-C(O)R'$ ,  $-CO_2R'$ ,  $-C(O)C(O)R'$ ,  $-C(O)CH_2C(O)R'$ ,  $-SO_2R'$ ,  $-SO_2N(R')_2$ ,  $-C(=S)N(R')_2$ ,  $-C(=NH)-N(R')_2$ , or  $-NR'SO_2R'$ ; and

$R'$  is hydrogen, an alkyl group, phenyl,  $-O(Phenyl)$ ,  $CH_2(Phenyl)$ , heteroaryl or non-aromatic heterocyclic ring;

each R is independently an alkyl, benzyl, or aryl group; or  $-N(R)_2$ , taken together, forms a non-aromatic heterocyclic group; and

k is 0, 1 or 2.

28. (Currently Amended) A method of inhibiting acute and chronic rejection of a transplanted organ[[,]] or transplanted tissue or transplanted cell in a subject in need thereof, wherein the transplanted organ or transplanted tissue is heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, or part of heart, kidney, lung, liver, pancreas, pancreatic islets, brain tissue, stomach, large intestine, small intestine, cornea, skin, trachea, muscle or bladder, said method comprising the step of administering an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof.